

Routing *

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Model currently in development

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Referenced YANG Model

IETF

<https://tools.ietf.org/html/rfc8022>

Conf Structure Hierarchy

```
Routing
+- DeviceAttributes
```

Routing Conf Structure

	XE	XR	NX
Routing			
(none)			
Routing +- DeviceAttributes			
enabled -Bool	(config)# ipv6 unicast-routing (config)# ip routing	N/A	N/A
enabled_ipv6_unicast_routing -Bool	(config)# ipv6 unicast-routing	N/A	N/A
enabled_ip_routing -Bool	(config)# ip routing	N/A	N/A
Show Commands:	show ip route show ip route vrf <vrf> show ipv6 route updated show ipv6 route vrf <vrf> updated	show route ipv4 show route vrf all ipv4 show route ipv6 show route vrf all ipv6	show ip route vrf all show ipv6 route vrf all
Sample Config:	ipv6 unicast-routing	N/A	N/A

Routing_Ops Structure

1.info

show commands

IOS-XE	IOS-XR	NX-OS
show ip route show ip route vrf <vrf> show ipv6 route updated show ipv6 route vrf <vrf> updated	show route ipv4 show route vrf all ipv4 show route ipv6 show route vrf all ipv6	show ip route vrf all show ipv6 route vrf all

Ops Structure

NOTE: where self represents the instance object of the ops object

```
self.info = {
  'ipv6_unicast_routing_enabled': ipv6_unicast_routing_enabled, # Conf/Ops Bool (XE only)
  'ip_routing_enabled': ip_routing_enabled, # Conf/Ops Bool (XE only)
  'vrf': {
    vrf: { # Ops Str 'default'
      'address_family': {
        address_family: { # Ops Str Enum('ipv4','ipv6')
          'routes': {
            route: { # Ops '192.168.1.0/24'
              'route': route, # Ops '192.168.1.0/24'
              'active': active, # Ops Bool
              'route_preference': route_preference, # Ops Int 110
              'metric': metric, # Conf/Ops Int 10
              'source_protocol': source_protocol, # Ops Enum('direct','static','ospf','ospfv3','isis','bgp','eigrp','rip','lisp','local','odr')
              'source_protocol_codes': source_protocol_codes, # Ops Str 'c|s|n|l|b'
              'last_updated': last_updated, # Ops Str '00:11:45'|'1d01h'
              'next_hop': {
                'outgoing_interface': {
                  outgoing_interface: {
                    'outgoing_interface': outgoing_interface, # Ops Str 'GigabitEthernet0/3'
                  },
                },
              'next_hop_list': {
                index: {
                  'index': index, # Ops Int 1
                  'next_hop': next_hop, # Ops Str '20.1.2.2'
                  'outgoing_interface': outgoing_interface, # Ops Str 'GigabitEthernet0/3'
                  'updated': updated, # Ops Str '00:11:45'|'1d01h'
                },
              },
              'special_nex_hop': {
                special_next_hop: {
                  'special_next_hop': special_next_hop, # Ops Enum('blackhole','unreachable','prohibit','receive')
                },
              },
            },
          },
        },
      },
    },
  },
}
```

```
}  
  }  
    }
```

No labels